



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/700643  
Filed: Mailed 11/16/00  
1<sup>st</sup> Inventor: MATSUMOTO, Hirokazu  
For: Antibody and Use Thereof  
Atty. Dkt. No. 2523 USOP

Art Unit: Tba  
Examiner: Tba  
Allowed:  
Batch:  
Paper No.:

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Submission of Executed Declaration

Assistant Commissioner for Patents  
Washington, D.C. 20231  
Sir:


Applicants herewith submit a duly executed Declaration of the inventors for the above-identified application.

Also enclosed is an Assignment and Assignment Recordation Cover Sheet.

Should the Examiner believe that a conference with applicants' attorney would advance prosecution of this application, he is respectfully requested to call applicants' attorney at (847) 383-3372.

Respectfully submitted,

Dated: February 2, 2001

  
Philippe Y. Riesen, Reg. No. 35,657  
Mark Chao, Ph.D., Reg. No. 37,293  
Attorney for Applicants  
Customer No. 23115



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## Declaration and Power of Attorney for Patent Application

### 特許出願宣言書及び委任状

### Japanese Language Declaration

### 日本語宣言書

私は、以下に記名された発明者として、ここに下記の通り宣言する：

As a below named inventor, I hereby declare that:

私の住所、郵便の宛先そして国籍は、私の氏名の後に記載された通りである。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明について、特許請求範囲に記載され、且つ特許が求められている発明主題に関して、私は、最初、最先且つ唯一の発明者である（唯一の氏名が記載されている場合）か、或いは最初、最先且つ共同発明者である（複数の氏名が記載されている場合）と信じている。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

### ANTIBODY AND USE THEREOF

上記発明の明細書はここに添付されているが、下記の欄がチェックされている場合は、この限りでない：

the specification of which is attached hereto unless the following box is checked:

☐ \_\_\_\_\_ の日に出版され、  
この出版の米国出版番号またはPCT国際出版番号は、  
\_\_\_\_\_ であり、且つ  
\_\_\_\_\_ の日に補正された出版（該当する場合）

☒ was filed on May 20, 1999  
as United States Application Number or  
PCT International Application Number  
PCT/JP99/02650 and was amended on  
\_\_\_\_\_ (if applicable).

私は、上記の補正書によって補正された、特許請求範囲を含む上記明細書を検討し、且つ内容を理解していることをここに表明する。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編規則1.56に定義されている、特許性について重要な情報を開示する義務があることを認める。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the need of the individual case. Any comments on the amount of time you are required to complete this form should be sent to Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Washington, DC 20231.



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Japanese Language Declaration  
(日本語宣言書)

私は、ここに、以下に記載した外国での特許出願または発明者証の出願、或いは米国以外の少なくとも一國を指定している米国法典第35編第365条(a)によるPCT国際出願について、同第119条(a)-(d)項又は第365条(b)項に基づいて優先権を主張するとともに、優先権を主張する本出願の出願日より前の出願日を有する外国での特許出願または発明者証の出願、或いはPCT国際出願については、いかなる出願も、下記の枠内をチェックすることにより示した。

I hereby claim foreign priority under Title 35, United States Code, Section 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application for which priority is claimed.

Prior Foreign Application(s)  
外国での先行出願

Priority Not Claimed  
優先権主張なし

10-140293 (Number) (番号)	Japan (Country) (国名)	21/05/1998 (Day/Month/Year Filed) (出願日/月/年)	<input type="checkbox"/>
 (Number) (番号)	 (Country) (国名)	 (Day/Month/Year Filed) (出願日/月/年)	<input type="checkbox"/>

私は、ここに、下記のいかなる米国仮特許出願についても、その米国法典第35編第119条(e)項の利益を主張する。

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.) (出願番号)	(Filing Date) (出願日)	(Application No.) (出願番号)	(Filing Date) (出願日)
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私は、ここに、下記のいかなる米国出願についても、その米国法典第35編第120条に基づく利益を主張し、又米国を指定するいかなるPCT国際出願についても、その同第365条(c)に基づく利益を主張する。また、本出願の各特許請求の範囲の主題が、米国法典第35編第112条第1段に規定された態様で、先行する米国出願又はPCT国際出願に開示されていない場合においては、その先行出願の出願日と本国内出願日またはPCT国際出願日との間の期間中に入手された情報で、連邦規則法典第37編規則1.56に定義された特許性に関わる重要な情報について開示義務があることを承認する。

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application.

(Application No.) (出願番号)	(Filing Date) (出願日)	(Status: Patented, Pending, Abandoned) (現況: 特許許可、係属中、放棄)
(Application No.) (出願番号)	(Filing Date) (出願日)	(Status: Patented, Pending, Abandoned) (現況: 特許許可、係属中、放棄)

私は、ここに表明された私自身の知識に係わる陳述が真実であり、且つ情報と信ずることに基づく陳述が、真実であると信じられることを宣言し、さらに、故意に虚偽の陳述などを行った場合は、米国法典第18編第1001条に基づき、罰金または拘禁、若しくはその両方により処罰され、またそのような故意による虚偽の陳述は、本出願またはそれに対して発行されるいかなる特許も、その有効性に問題が生ずることを理解した上で陳述が行われたことを、ここに宣言する。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



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Japanese Language Declaration  
(日本語宣言書)

委任状: 私は本出願を審査する手続を行い、且つ米国特許商標庁との全ての業務を遂行するために、記名された発明者として、下記の弁護士及び/または弁理士を任命する。(氏名及び登録番号を記載すること)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).

Philippe Y. RIESEN (Reg. No. 35,657), Mark CHAO (Reg. No. 37,293)

書類送付先

Send Correspondence to:

Customer No. 23,115

直通電話連絡先: (氏名及び電話番号)

Direct Telephone Calls to: (name and telephone number)

Mark CHAO  
Takeda Pharmaceuticals America, Inc.  
Phone:(847)383-3372 Fax:(847)383-3481

唯一または第一発明者氏名		Full name of sole or first inventor	
Hirokazu MATSUMOTO			
発明者の署名	日付	Inventor's signature	Date
		Hirokazu Matsumoto	JAN/29/2001
住所	Residence		
7-9-1204, Kasuga 1-chome, Tsukuba-shi, IBARAKI 305-0821 JAPAN			
国籍	Citizenship		
Japan			
郵便の宛先	Post Office Address		
Takeda Chemical Industries, Ltd. (IPD) 17-85, Jusohonmachi 2-chome, Yodogawa-ku, OSAKA 532-8686 JAPAN			
第二共同発明者がある場合、その氏名		Full name of second joint inventor, if any	
Chieko KITADA			
第二共同発明者の署名	日付	Second inventor's signature	Date
		Chieko Kitada	January 29, 2001
住所	Residence		
2-8, Minamikoyochi 1-cho, Sakai-shi, OSAKA 590-0073 JAPAN			
国籍	Citizenship		
Japan			
郵便の宛先	Post Office Address		
Takeda Chemical Industries, Ltd. (IPD) 17-85, Jusohonmachi 2-chome, Yodogawa-ku, OSAKA 532-8686 JAPAN			

(第三以下の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)



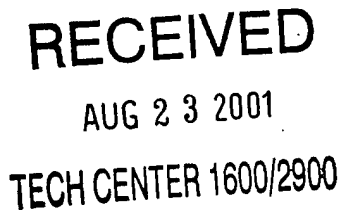
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Attached Sheet to the Declaration

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第三共同発明者		Full name of third joint inventor, if any	
Shuji HINUMA			
発明者の署名	日付	Third inventor's signature	date
		<i>Shuji Hinuma</i>	<i>January 29, 2001</i>
住所		Residence	
7-9-1402, Kasuga 1-chome, Tsukuba-shi, IBARAKI 305-0821 JAPAN			
国籍		Citizenship	
		Japan	
郵便の宛先		Post Office Address	
Takeda Chemical Industries, Ltd. (IPD), 17-85, Jusohonmachi 2-chome, Yodogawa-ku, OSAKA 532-8686 JAPAN			
第四共同発明者		Full name of fourth joint inventor, if any	
発明者の署名	日付	Fourth inventor's signature	date
住所		Residence	
国籍		Citizenship	
郵便の宛先		Post Office Address	
第五共同発明者		Full name of fifth joint inventor, if any	
発明者の署名	日付	Fifth inventor's signature	date
住所		Residence	
国籍		Citizenship	
郵便の宛先		Post Office Address	
第六共同発明者		Full name of sixth joint inventor, if any	
発明者の署名	日付	Sixth inventor's signature	date
住所		Residence	
国籍		Citizenship	
郵便の宛先		Post Office Address	
第七共同発明者		Full name of seventh joint inventor, if any	
発明者の署名	日付	Seventh inventor's signature	date
住所		Residence	
国籍		Citizenship	
郵便の宛先		Post Office Address	



U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

**PATENTS ONLY**

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

2. Name and address of receiving party(ies):

Name: TAKEDA CHEMICAL INDUSTRIES, LTD.

Internal Address:

**Street Address:** 1-1, Doshomachi 4-chome, Chuo-ku

### Merger

### Change of Name

Other

City: Osaka, Country: Japan Zip: 541-0045

Execution Date: January 29, 2001

Additional name(s) & address(es) attached? No.

4. Application number(s) or patent number(s):

Title: ANTIBODY AND USE THEREOF

If this document is being filed together with a new application, the execution date of the application is :

**A. Patent Application No.(s)**

**B. Patent No.(s)**

**09/700.643**

Additional numbers attached? No

5. Name and address of party to whom correspondence concerning document should be mailed:

6. Total number of applications and patents involved: 1

**Name: Customer No. 23,115**

7.	Total fee (37 C.F.R. §3.41) . . . . .	\$40.00
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**Enclosed**

XX Authorized to be charged to deposit account

**Street Address:** \_\_\_\_\_

8. Deposit account number: 500799

City: Country Zip:

(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

**Mark Chao (Reg. No. 37,293)**

Name of the Person signing

**Signature**

**Date**

**Total number of pages including cover sheet, attachment, and document: 3**

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

## ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor hereby sells and assigns, to TAKEDA CHEMICAL INDUSTRIES LTD., a corporation of Japan, 1-1, Doshomachi 4-chome, Chuo-ku, Osaka, Japan (hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to the following invention and U.S. application filed thereon, and the entire right, title and interest in and to any and all Letters Patents which may be granted therefor in the United States, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made.

Title of Invention : ANTIBODY AND USE THEREOF

United States Patent Application :

[ ] executed concurrently herewith  
[ ] executed on \_\_\_\_\_  
[X] Serial No. 09/700,643 Filed November 16, 2000

Each of the undersigned acknowledges that this sale and assignment includes any and all divisions or continuations of said United States Patent application, and any and all Letters Patent of the United States which may issue on any such applications, including any and all reissues or extensions thereof.

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, assist in and testify in any related proceedings including interferences or lawsuits concerning this application or continuation, division or reissue thereof, and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to obtain a grant of a valid United States Patent on said invention;

Each of the undersigned hereby grants ASSIGNEE and its legal representatives, the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment and specifically, the power to insert in the space provided above, the filing date and application number of the application when known.

In witness hereof, executed by the undersigned on the date(s) opposite the undersigned names.

NAMES AND SIGNATURES OF INVENTORS		
1.Name: Hirokazu MATSUMOTO	Signature: <i>Hirokazu Matsumoto</i>	Date: <i>January 29, 2001</i>
2.Name: Chieko KITADA	Signature: <i>Chieko Kitada</i>	Date: <i>January 29, 2001</i>
3.Name: Shuji HINUMA	Signature: <i>Shuji Hinuma</i>	Date: <i>January 29, 2001</i>
4.Name:	Signature:	Date:
5.Name:	Signature:	Date:
6.Name:	Signature:	Date:
NAMES AND SIGNATURES OF WITNESSES*		
Name/ Taiji ASAMI For: 1 - 3	Signature: <i>Taiji Asami</i>	Date: <i>January 29, 2001</i>
Name/ Naoki NISHIZAWA For: 1 - 3	Signature: <i>Naoki Nishizawa</i>	Date: <i>January 29, 2001</i>
Name/ For:	Signature:	Date:
Name/ For:	Signature:	Date:
Name/ For:	Signature:	Date:
Name/ For:	Signature:	Date:

\*Notice for Witnesses! Please indicate which inventor(s) you are signing for by writing the corresponding numbers after "For."